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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/067,286	02/07/2002	Shinji Abe	401556/TAKADA	7913
23548	7590	10/07/2003		
LEYDIG VOIT & MAYER, LTD 700 THIRTEENTH ST. NW SUITE 300 WASHINGTON, DC 20005-3960			EXAMINER LEE, BENNY T	
			ART UNIT 2817	PAPER NUMBER

DATE MAILED: 10/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.



UNITED STATES DEPARTMENT OF COMMERCE  
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SERIAL NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NO.
10169286			

EXAMINER	
ART UNIT	PAPER NUMBER

DATE MAILED:

This is a communication from the examiner in charge of your application.

COMMISSIONER OF PATENTS AND TRADEMARKS

☐ This application has been examined ☒ Responsive to communication filed on 30 October ☐ This action is made final.

A shortened statutory period for response to this action is set to expire Three (3) month(s), 7 days from the date of this letter.  
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

- |   |   |
|---|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited by Examiner, PTO-892. | 2. <input type="checkbox"/> Notice re Patent Drawing, PTO-848.                  |
| 3. <input type="checkbox"/> Notice of Art Cited by Applicant, PTO-1449                  | 4. <input type="checkbox"/> Notice of Informal Patent Application, Form PTO-152 |
| 5. <input type="checkbox"/> Information on How to Effect Drawing Changes, PTO-1474      | 6. <input type="checkbox"/> _____   |

Part II SUMMARY OF ACTION

1. ☒ Claims 1-20 are pending in the application.  
Of the above, claims \_\_\_\_\_ are withdrawn from consideration.
2. ☐ Claims \_\_\_\_\_ have been cancelled.
3. ☐ Claims \_\_\_\_\_ are allowed.
4. ☒ Claims 1-18; 19, 20 are rejected.
5. ☐ Claims \_\_\_\_\_ are objected to.
6. ☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.
7. ☐ This application has been filed with informal drawings which are acceptable for examination purposes until such time as allowable subject matter is indicated.
8. ☐ Allowable subject matter having been indicated, formal drawings are required in response to this Office action.
9. ☐ The corrected or substitute drawings have been received on \_\_\_\_\_. These drawings are: ☐ acceptable;  
☐ not acceptable (see explanation).
10. ☐ The ☐ proposed drawing correction and/or the ☐ proposed additional or substitute sheet(s) of drawings, filed on \_\_\_\_\_ has (have) been ☐ approved by the examiner. ☐ disapproved by the examiner (see explanation).
11. ☐ The proposed drawing correction, filed \_\_\_\_\_, has been ☐ approved. ☐ disapproved (see explanation). However, the Patent and Trademark Office no longer makes drawing changes. It is now applicant's responsibility to ensure that the drawings are corrected. Corrections MUST be effected in accordance with the instructions set forth on the attached letter "INFORMATION ON HOW TO EFFECT DRAWING CHANGES", PTO-1474.
12. ☒ Acknowledgment is made of the claim for priority under 35 U.S.C. 119. The certified copy has ☒ been received ☐ not been received  
☐ been filed in parent application, serial no. \_\_\_\_\_; filed on \_\_\_\_\_.
13. ☐ Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.
14. ☐ Other

SN 67286

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The disclosure is objected to because of the following informalities: Page 4, fifth and sixth full paragraphs, note that these paragraphs need to reference the appropriate figures(s). Pages 5, 6, note that the following wording should be rephrased for clarity of description at each occurrence: "dielectric constant-different columnar bodies"; "the axial center sides thereof"; "planar regularities". Page 7, line 4; page 17, lines 27, 28; page 18, lines 30, 31; page 19, line 15: note that "In its turn" should be rephrased for a better characterization. Page 7, line 5, note that "good in..." should be rephrased. Page 8, line 16, note that --and may not be described in detail for all drawing figures--- should follow "numbers" for a proper characterization. Page 9, line 19, note that "sizcs" should be rewritten as -- spacing -- for clarity. Page 13, line 8, note that "Owing" should be rewritten as --Due-- and "the adoption" <sup>should be rephrased; line 15,</sup> "mm" should be rewritten as -- millimeter (mm)-- and "micro" should be rewritten as --microwaves-- for clarity. Page 14, line 5, note that "defective" should be rewritten as --defect-- for a proper characterization; line 6, note that "its disordered state" is vague in meaning; line 17, note that "like air low in dielectric constant" should be rephrased as--low in dielectric constant, like air -- for a better description; lines 19, 23, note that reference to "I (or II)-type waveguide" is vague in meaning and needs clarification; line 19, 23, note that "tentatively named in this way" is vague in meaning. Page 14, line 30; and page 15, lines 2, 9, 10, should "waves" properly be --fields--? For a proper characterization? Page 15, lines 15-18, note that the description here at is vague in meaning and needs clarification. Page 16, line 18, note that "one layers" is of inconsistent tense; line 30, note that "There is thus" should be rewritten as --Thus there is -- for a proper characterization. Note

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that the labeled features in Figs. 3, 5 and 6 need to be explicitly reference in the detail description of the preferred embodiment.

Appropriate correction is required.

The drawings are objected to because of the following: In figs. 2, 3, 5, 6, 8, 10, 11, note that proper cross-hatching of dielectric material (i.e. alternate thick and thin diagonal lines) should be provided for appropriate elements; In Figs. 7, 8, 9, 10, 11 note that these figures should be labeled as -- PRIOR ART--; In fig. 8, note that reference label --100-- needs to be provided; In fig. 10, note that reference label -- 112-- needs to be provided. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claims 1-18; 19, 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 1, 19, note that reference to “on the axis” and “off the axis” is vague in meaning as to which one of the previously recited “respective axes” is intended by “the axis”.

The claims have been found objectionable for reasons set forth below:

The format of the claims are found objectionable since the claims do not commence on a separate sheet as required by 37 CFR 1.75 (h).

In claims 1, 19, note --respective-- should precede appropriate occurrences of “lengths” and “axes” for a proper characterization.

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The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Ishikawa and Brommer et al disclosed dielectric bodies with cylindrical elements therein.

Any inquiry concerning this communication should be directed to Benny Lee at telephone number (703) 308-4902.

A handwritten signature in black ink that reads "Benny Lee". The signature is fluid and cursive, with the first name "Benny" and the last name "Lee" clearly distinguishable.

BENNY T. LEE  
PRIMARY EXAMINER  
ART UNIT 2817

B LEE/pj

09/30/03